

VHDL Type Attributes

- Integer Types (including Enumerated Types)

type'left -- left most value

type'right -- right most value

type'high -- highest value

type'low -- lowest value

type'pred(value) -- predecessor of value

type'succ(value) -- successor of value

type'leftof(value) -- left of value

type'rightof(value) -- right of value

type'pos(value) -- position of value in enumerated type

type'val(value) -- value of position in enumerated type

VHDL Type Attributes

- Array Types

<i>signal'left</i>	-- left most index value
<i>signal'right</i>	-- right most index value
<i>signal'high</i>	-- highest index value
<i>signal'low</i>	-- lowest index value
<i>signal'range</i>	-- range of array *
<i>signal'reverse_range</i>	-- range of array *
<i>signal'length</i>	-- length of array

- With foo defined as `unsigned(3 downto 0)`
`foo'range → 3 downto 0`
`foo'reverse_range → 0 upto 3`